

EXHIBIT A

Captain R. Russell Johnson
RJ MARITIME ASSOCIATES, LLC
465 Davis Bay Road
Lopez Island, Washington 98261
360 468-2655
cell 425 418-9487

SEAGOING EXPERIENCE

- 2000 – 2012 **Vessel Piloting, Safety, Training, Evaluation, and Regulatory Compliance. Dunlap Towing Co., Everett, Washington**
- Company emergency relief Master. West Coast, Alaska, Asia, Russia.
 - Assist and train Masters piloting vessels Southeast and Western Alaska.
 - Master of Company salvage vessel, “Salvage Chief”, from 2000 to 2006.
 - Train and evaluate senior Captains and Mates onboard vessels.
 - Certified U.S. Coast Guard onboard Designated Examiner.
- 1997 –2000 **Vessel Master, Piloting, Training, and Evaluation, Harley Marine Services, Seattle Washington.**
Emergency relief Master of various company vessels. On board training and evaluation of Captains and Mates. This experience in addition to full time shoreside management duties.
- 1994 – 1997 **Vessel Master, Dunlap Towing Co., Everett, Washington**
Master of various company vessels. Areas of operations: Alaska, West Coast of U.S., Hawaii.
- 1984 – 1994 **Piloting, Training, and Evaluation, Crowley Maritime Corp., Seattle, WA.**
Piloted various company equipment up to 7200 h.p. tugs and 650 ft. barges. Conducted on board training and evaluation of Masters and Mates in addition to management duties.
- 1976 – 1984 **Master, Crowley Maritime Corp., Seattle, WA.**
Master of tugs up to 7200 h.p. and barges to 650 ft. in length. Experience includes ship tows to 950 ft., drill rigs, petroleum barges to 150,000 bbls., dry cargo barges, Ro-Ro barges, Hydro train barges, and harbor assist work. Geographic experience includes all U.S. West Coast Ports, U.S. East and Gulf Coast ports, Central, Western, Arctic Alaska (and inside passage waters Southeast Alaska), Hawaii, Guam, Wake Island, Asia, Persian Gulf, Red Sea, Suez Canal, India, Egypt, Italy, France, Puerto Rico, and Panama.
- 1967 – 1975 **Master, PAC Lines, Seattle, WA.**
Master of tugs to 5000 h.p. Geographic experience includes all U.S. West Coast ports, Central, Western, and Arctic Alaska, U.S. East Coast and Gulf Coast ports, Hawaii, Asia, and Panama.

SHORESIDE WORK EXPERIENCE

2012 - present **RJ Maritime Associates, LLC**

- Maritime Project Management
 - Arctic ice navigation, reconnaissance, and management.
2013, 2015 Foss/Exxon Point Thompson project
 - 2014 Faiweather/Choest/Shell Ice Pilot procurement project
 - 2016 Chouest/Shell anchor retrieval project, Chukchi & Beaufort Sea
 - 2016 Foss/Hillcorp rig delivery project, Pt. Oliktok
- Accident Investigation
- Legal Consulting

2000 – 2012 **Director, Safety, Training, & Regulatory Compliance, Dunlap Towing Co,**

- Responsible for safety, training, and evaluation of vessel personnel.
- Alaska ice reconnaissance and piloting
- Responsible for company compliance with International Safety Management (ISM) System and Responsible Carrier Program (RCP) of American Waterway Operators.
- Certified Internal Auditor for ISM audits.
- Company Security Officer responsible for vessel and company maritime security.
- Qualified Individual for Company Emergency Response. Certified Incident Commander.
- Qualified Instructor for Coast Guard licensing courses.
- Designated Examiner for signing Towing Officer Assessment Records (TOAR)
- Responsible for investigation of accidents and injuries and conducting Root Cause Analysis.
- Assisted in developed of Simulator Training Program at Pacific Maritime Institute for the training and evaluation of Mates and Masters and Puget Sound Pilots.
- Member U.S. Coast Guard Regional Quality Steering Committee (RQSC), Seattle.
- Served on AWO Regional Safety Committee 2000 to present. Elected to Board of Directors AWO 2007 to present. Elected Vice Chairman 2008.

1999 – 2000 **Director, Operating Services, Harley Marine Services.** Seattle, WA

Staff responsibility for operations of all Harley Marine Services companies.
Responsibilities included safety, training, and auditing.

1997 – 1999 **General Manager, Westoil Marine, Gabon, Africa**

Formed crude oil transportation company in Gabon, Africa. Developed successful operating plan for Chauvco International, Inc., Calgary, Canada to deliver product from oil production wells to offshore storage tanker and arrange transfer to western markets.

1990 – 1994 **Pacific Region Manager, Operations, Crowley Marine Services,**

Responsible for management of Marine Operations Department, and for all outside towing operations for the Pacific Region, Alaska Arctic to California.

1988 – 1990 **General Manager, Red and White Fleet, Crowley Maritime Corporation, San**

Francisco. Profit and loss responsibility for passenger service company.

1985 – 1990 **General Manager Harbor Tug and Barge, Crowley Maritime Corporation, San Francisco.** Responsibility for harbor operations.

EDUCATION

Bellarmino Prep, Tacoma, Washington
Seattle University, Seattle, Washington
College of Marin, San Rafael, California
City University, Seattle, Washington

PROFESSIONAL CERTIFICATION AND TRAINING

1971 – Kildals Nautical School, Seattle, Washington
1600 ton Ocean Masters License
1982 – Consulted in the development of Simulator Training Program for Mates and Masters. Kings Point Maritime Academy.
1984 to 1985 – Trained over 50 Mates and Masters in boat handling, situational awareness, and bridge resource management at Kings Point Maritime Academy.
1991 – Hartec Management Consultants, Seattle, Washington
Hazardous Waste and Emergency Response Training
1991 - International Loss Control Institute (ILCI) 2 day course
Loss Control and Safety Auditing
1992 – Incident Management Associates, Seattle, Washington
Incident Command System Training
1992 – Sam Sacco and Associates, Seattle, Washington
Media Crisis Training
2000 – Pacific Northwest Maritime Institute. Seattle, Washington
Advanced Training Global Maritime Distress and Safety Systems
2000 – Fremont Maritime Services, Seattle, Washington
Basic Safety Training 5 day course including firefighting and survival.
2000 – Pacific Northwest Maritime Institute, Seattle, Washington
Bridge Resource Management training
2001 - Pacific Northwest Maritime Institute, Seattle, Washington
ARPA Training
2002 – Seattle Maritime Academy, M/T Consulting. Seattle, Washington
40 Hour Train the Trainer for certification of USCG Qualified Instructor.
2002 – Received U.S. Coast Guard Citation for Meritorious Service in the analysis of crew alertness and fatigue on board commercial towing vessels operating on the West Coast of the United States
2003 – Crisis Management Training, Seattle, Washington
Charles L. Webster & Assoc.
2003 – Crew Endurance Management Coaches Training. Seattle, Washington

B.R. Emond, U.S. Coast Guard

- 2003 – Completed 10 hour Occupational Safety and Health Training Course in General Industry Safety and Health
- 2004 – Assisted in development of Simulator Training Course at Pacific Maritime Institute, Seattle, Washington. For training of Mates and Masters in Navigation, Boat handling, and Bridge Resource Management.
- 2004 – Security Officer Training: Port, Company, & Ship
Pacific Maritime Institute. Seattle, Washington
- 2004 – Internal auditors training International Safety Management (ISM) System
Gary Schmidt, SQE Consulting
- 2005 – Assisted in development of simulator based Puget Sound Pilot Testing and Evaluation at Pacific Maritime Institute, Seattle, WA.
- 2005 – Incident Command System Training
American Environmental Services
- 2006 – Certified as “Designated Examiner” for assessment of competence of candidates for towing licenses.
- 2008 – Recertified as “Designated Examiner” for assessment of competence of candidates for towing licenses.
- 2010 – Continued participation on behalf of Dunlap Towing co. to the Pacific Regional Quality Steering Committee, a safety partnership of the U.S. Coast Guard with the American Waterway Operators.
- 2010 – Received Safety Management System Training with emphasis on Risk Assessment and Safe Management Practices. Pacific Maritime Institute, Seattle Washington.
- 2011 – Received U.S. Coast Guard approval as “Qualified Instructor” for 16 different licensing courses at Pacific Maritime Institute, Seattle, Washington. Courses include Seamanship, Shiphandling, Radar, Bridge Resource Management, Navigation, Rules of the Road, Watchkeeping, and Officer in Charge of a Navigation Watch.
- 2011 – Qualified to assess candidates for STCW endorsements in those areas that I have approval to teach as a Coast Guard approved “Qualified Instructor”.
- 2011 – Received Root Cause Analysis and Incident Investigation training and certification. America Bureau of Shipping Marine Industry RCA/Incident Investigation Course.
- 2013 – Recertified as a “Designated Examiner” for assessment of competence of candidates for towing license.
- 2016 – Renewed for Continuity purposes 1600 Ton Masters license and Master of Towing Vessels for 10th issue of same.

ENCLOSURE B

**R. Russell Johnson
RJ Maritime Associates, LLC
465 Davis Bay Road
Lopez Island, Washington 98261**

Date: June 10th, 2019

Subject Expert Opinion: Heko vs ChemTrack

I have been asked by Chris Nicoll of the law firm Nicoll, Black & Feig to provide my professional opinion as to duty of care and causation surrounding the cargo shifting on the barge KRS330-11 while underway from Naknek, Alaska to Seattle, Washington. The Tug Captain Cae encountered near gale force winds and heavy seas in Unimak Pass that caused the contaminated soil cargo to shift, creating a significant list.

In preparation for this report I have reviewed the following documents:

1. Complaint of Heko Services vs. ChemTrack Alaska, Inc.
2. ChemTrack Alaska, Inc.'s answer to Heko Services' Complaint
3. Copy of Time Charter between Heko Services and ChemTrack
4. Load and Stow Survey by Peter B. Costello
5. Departure Memorandum from Peter B. Costello
6. DeForge Incident Report from Scott Vandusen, Captain of Tug Captain Cae
7. Barge Specifications of KRS 330-11
8. Various photographs taken of barge and loading facility
9. Travers Survey Report, August 28th, 2018
10. Captain Cae logs
11. Tug Clayton Arthur logs
12. Various e-mail reports and memos from Captain Cae to Deforge, June 3rd and 4th.
13. Various e-mails from Steven McCain, ChemTrack Project Manager
14. ChemTrack loadout drafts on departure Naknek, 5/30/18
15. Barge 330-11 stow plan pre-departure Sand Point
16. NWS Coastal Marine weather forecast for area from Cape Sarichef to Nikolski from Thursday, May 31 to Saturday, June 2nd, 2018
17. Report on Weather and Sea State in the Vicinity of Unimak Pass on 2 June 2018 issued by Dr. Nicholas Bond

By way of background relevant to this case, I currently hold a 1600-ton Master of Oceans license with an endorsement as Master of Towing Vessels, which I have held continuously for over 45 years. During my career I have been the Captain of towing vessels and salvage ships ranging from 9000 horsepower ocean-going tugboats to 150 horsepower harbor crew boats. I have made over 100 voyages to Alaska and have called at most of the Southeast Alaska, Bristol Bay, Arctic,

and Western Alaska ports, including Naknek and Sand Point and have loaded and unloaded cargo in all of them.

From 1989 to 1994, I was the Operations Manager for Crowley Maritime Corporation in Seattle, Washington. In this capacity, I was responsible for the safe operations of over 100 tugs and barges whose primary operations were in Alaskan waters.

In 1994, I went back to sea, working as a Captain for Dunlap Towing Co. In this capacity I made numerous voyages to Bristol Bay and Western Alaska. In 2000, I returned shoreside, working for Dunlap Towing as Director of Safety, Training, and Regulatory Compliance until my retirement in June 2012. In this capacity, I was responsible for implementing the International Safety Management System in 2004 and was the Designated Person Ashore (DPA). For this responsibility, I received training in ISM internal auditing and performed yearly internal audits of the vessels and the management system. As a shoreside manager, I also had regular opportunities to travel to Western Alaska, Bristol Bay and Arctic ports to observe and audit vessel and cargo operations. Additionally, my shoreside responsibilities included bidding potential towage contracts and servicing existing contracts. At Dunlap I was designated the "Qualified Individual" and identified in our Emergency Response Plans as being responsible for receiving initial contact and co-coordinating initial response to any emergencies such as oil spills, collisions, allisions, groundings, lost barges, and injuries.

I have also received Incident Command Training and I am qualified to direct ongoing response to serious company incidents that may occur. For over thirty years I have been responsible for investigating accidents and injuries aboard vessels owned by the companies I have worked for. The chief reason for these investigations is to determine the root cause of the incident and prevent repeat occurrences. Accordingly, I have been formally trained in Root Cause Analysis and have been certified by the American Bureau of Shipping.

Based on this experience and common seamanship practice I have arrived at the following observations and opinions:

Observations:

1. ChemTrack Alaska, Inc. contracted with Heko Services, Inc. to transport contaminated soil from Naknek, Alaska to Seattle, Washington. Heko promised to provide the Tug Clayton Arthur and the barge KRS 330, or similar vessels, and ultimately provided the Tug Captain Cae and barge KRS 330-11. Under the terms of the contract ChemTrack was responsible for loading the barge. ChemTrack provided personnel to load the barge, however, Heko also provided additional personnel to advise and assist. While loading the barge with the soil, Heko apparently decided to use the barge KRS 330-11 as a tow of opportunity to transport two of its KRS Vicon 4100 crawler cranes to Seattle. One KRS Vicon 4100 was loaded on centerline of the barge, while the second KRS Vicon 4100 was loaded outboard to port. The cranes were not part of the original stow plan, nor contractually agreed upon cargo, and ChemTrack was not responsible for their loading.

2. The contaminated soil cargo finished loading in the early hours of May 30, 2018. The Captain Cae departed at 0335 hrs. and the tug and tow proceeded on its voyage to Seattle. On the morning of May 29th, the day before departure, a 96-hour surface forecast map for the North Pacific, indicated an intense 974 mlb. low approximately 500 miles due west of Unimak Pass. This storm was creating winds of 40 knots on the trailing side of the low center. (Bond report, page 7) On the date and the time of the departure of the Tug Captain Cae and the barge KRS 330-11, the following weather advisory was issued from National Weather Service (NWS) forecast office in Anchorage. The advisory was issued at 0348 hrs. The advisory covered the area from Cape Sarichef to Nikolski, Pacific Side, that includes Unimak Pass.

Small craft advisory through Thursday
Today.....SW wind 20 kn seas 8 ft. Rain showers.
Tonight....W wind 25 kn. Seas 8 ft.
Thu.....W wind 25 kn. Seas 8 ft.
Thu night..... W wind 20 kn. Seas 6 ft.
Fri.....SE wind 25 kn. Seas 5ft.
Sat.....S wind 30 kn. Seas 11 ft.
Sun.....S wind 15 kn. Seas 10 ft.

On Thursday, May 31st, the NWS report was revised, and the weather was predicted to deteriorate further to gale force winds: Saturday: S wind 35 kn. Seas 11 ft. was predicted. (Bond report, page 3)

3. Despite these weather warnings, Captain Vandusen and his crew aboard the Captain Cae, towing the KRS 330-11, departed Nakenek and proceeded toward Unimak Pass. The Captain Cae rounded Cape Sarichef at 0300 hrs. and entered Unimak Pass on the precise day that the weather was predicted to be the worst: Saturday, June 2nd. The Captain Cae logs show that the weather he encountered was nearly identical to that which was forecast: Wind SSE 30 kns, seas 8' – 10'. (Captain Cae logbook, 1600 hrs, June 2nd, 2018. Location: Unimak Bight) It was in these conditions that the barge took on seas, the load shifted, and the stability of the barge was compromised.
4. It is my understanding that neither Heko nor ChemTrack hired a surveyor to inspect the load or the lashings before the departure and therefore no pre-departure survey is available. In the absence of a Load and Stow Survey, Captain Scott Vandusen describes the cargo and lashing process in the following manner in his Statement of Event or Hazardous Condition: "One crane w/no boom lashed to port stern. One crane w/boom lashed to center stern. Slight (>6") port list on departure due to port stern crane. A square border of mini containers was laid out and tacked (welded) to the deck. A giant tarp was laid across whole barge, with dirt then loaded on top of tarp. Excess tarp was overlaid to cover load with remaining tucked inboard behind containers. Chains (8) were tied from stbd containers, across dirt pile, and tied to port containers using ratchet tie down straps for the purpose of holding down the tarp. The crane boom was then set down on top of the dirt pile."

5. Captain Vandusen continues in his report to describe the deteriorating condition of the barge as it encountered heavy weather: "Upon transiting Unimak we had 4-6' at time of transit. Black tarp lasted only a few hours before wind blew it off port side of barge. Tarp is currently hanging off port side of barge. It looks like tarp became loose or blew out due to the product shifting. I believe load shifted due to the way the barge was loaded. More dirt was loaded stbd stern to compensate for the weight of the crane on port stern. Well above the container fence to correct list that developed while loading." (Vandusen statement: 1130hrs, Sunday, June 3rd) It is important to note that although his report says that he only encountered 4 to 6' at time of transit, his log showed that a few hours later in Unimak Bight they encountered 30 kn winds and 10' seas. (observation #3)
6. On June 3rd, 23 miles east of False Pass, Captain Vandusen dropped back to inspect his barge in deep water and calm weather. He found that the "Barge has 5-6ft port list bow. 2-3ft port list stern. Est. 50% of dirt shifted to port side and is 4-5 ft. on top of container fence. Only one lifting strap connected to loose chain across crane boom and shackled to a loose chain that was run port to stbd to hold down tarp only. No other boom lashing visible." (Vandusen Statement of Event or Hazardous Condition) After inspecting the barge he called the Deforge home office and the decision was made to divert the tow into Sand Point.
7. After arrival of the Tug and Tow in Sand Point, Mr. Peter Costello, (Marine Surveyor/Adjuster) of Professional Adjusters of Alaska, Inc., was hired to attend the re-stow of the Kelly Ryan Services Barge KRS330-11. He witnessed the re-stow from June 18th through June 22nd, 2018. He was hired to conduct a load and stow survey in Sand Point "for a load of dirt that was enroute from Bristol Bay to Seattle for incineration." In his report he notes that "2 KRS owned Vicon 4100 Model crawler cranes were loaded on deck aft of the cargo pile on the stern. It should be noted, these crawler cranes belong to Heko and, as I have been advised, are not part of the bill of lading to be issued to ChemTrack."
8. Mr. Costello attributes the reason for the cargo shifting as follows: "during the voyage through Unimak Pass, the cargo became wet with seawater when the Capt. Cae encountered head seas. The cargo liquified, and sought its own level, thereby setting the barge sharply off trim to port. Due to safety concerns of the tug master, diversion was necessary to Sand Point where the barge is being reloaded." (Costello Load and Stow Survey)
9. Mr. Costello also attributes causation of the cargo shift as "the result of the Vicon Crawler cranes being initially loaded off centerline resulting in an inherent tendency to result in the port list, once the cargo liquefied and sought its own level. Had the cranes been loaded on trim (as is presently the case) the diversion would not have been necessary into Sand Point." (Costello Load and Stow Survey)
10. Mr. Costello has added a section to the survey report entitled: Surveyor's Concerns Re: Vicon 4100 Crane to Starboard. He states that: "the undersigned is concerned with the fact that the boom on the crane is being shipped in the hoisted position, commonly

referred to as a “Flying Boom”.....the undersigned, as a matter or [sic] record, has spoken with Justin Buckley at Kelly Ryan on this subject. Mr. Buckley confirmed that the crane is their cargo, any damage and stowage is their responsibility. It was pointed out to him that, in the event the boom fails, it will result in possible diversion of the voyage.”

11. The Tug Captain Cae was replaced by the Tug Clayton Arthur for the continuing trip to Seattle. Mr. Costello placed weather parameters on the trip and which Captain Dalton, skipper of the Clayton Arthur agreed to. The tug and tow were instructed to transit via Sand Point to Shelikoff Straits, inside Shelikoff to Seward, direct to Cape Spencer (unless diversion is advised through Prince William Sound), thence via the inside passage to Seattle. It was agreed between surveyor Costello and Captain Dalton that they would not proceed into forecasted gale conditions where winds were forecasted to exceed 25 knots, combined sea and swell not to exceed 6’.

Opinion:

1. In the absence of a marine surveyor, Captain Vandusen had the ultimate responsibility and authority to assess the load on the KRS 330-11 and make the final decision to depart in the conditions that the barge was loaded. The charter between Heko and ChemTrak, clause 3.B, states in part: “the manner and means of the performance of the transportation services shall at all times be left to the judgment, discretion, direction and control of Owner and master.” This appears to leave the final decision about whether to depart under the prevailing conditions in the hands of the master. If so, it is in keeping with general seamanship standards and practices: the master is always and ultimately responsible for the safety of the vessels under his command. Captain Vandusen says in his report that he believed that the load shifted due to the way the barge was loaded, well above the container fence, that was placed to contain the load, in order to correct a list that developed while loading. (observation #5) It does not appear that he voiced these concerns at any time prior to the departure nor did he take any action to correct the abnormal load conditions, if indeed he believed them to be abnormal at the time.
2. Peter Costello, surveyor for the barge and cargo reload in Sand Pt. had the same critical assessment for the cause of the load shifting and causing the barge to list heavily and become unseaworthy. The placement of the Vicon crane that was loaded on the port side of the barge led to the decision to pile more of the contaminated soil on the starboard side of the barge in order to correct the list. The soil was piled high above the containers that were in place to contain the cargo. The unprotected soil was bound to become emulsified when the tarp blew off and the barge started shipping heavy seas in Unimak pass causing it to develop a severe port list. It is my opinion that the decision to load the KRS 330-11 off center line, creating a port list that needed correction, was a causal factor of the barge becoming unseaworthy. The decision to load the Vicon 4100 crawler cranes in this manner was made by Heko. Mr. Justin Buckley, Heko representative, assured Mr. Costello before the continuation of the voyage from Sand Point that “the crane is their cargo, any damage and stowage is their responsibility”. It was the positioning of the cranes and boom on the deck of the 330-11 that restricted the space available to load the

soil. In my opinion the barge, configured as it was, was unseaworthy for the anticipated voyage and conditions. Had the cranes not been on the barge, more deck surface would have been available, enabling the soil to be loaded to heights lower than the containment. Ultimately, though, it was the decision of the master to depart with a barge that was already listing, and knowing the predicted weather conditions, that caused the cargo to shift and resulted in interruption of the voyage and the need to divert to Sand Point.

3. In my opinion, the unseaworthy conditions of the barge KRS 330-11 were readily identifiable prior to the barge sailing from Naknek as they certainly were after the fact by both Captain Vandusen and Surveyor Peter Costello. (observations 5,6,7,8) Again, Captain Vandusen had the ultimate authority and responsibility to correct these unseaworthy conditions and I have seen no evidence that he voiced concerns, recorded them in his logbook, or filed any kind of note of protest before incident. The Barge KRS 330-11 was unfit for its intended purpose as loaded from the start of this voyage. It should have been obvious before the Tug Captain Cae with the KRS 330-11 departed and was proven unfit as soon as they hit bad weather.
4. The heavy weather encountered in Unimak Pass certainly contributed to the shifting of the load on the barge. The heavy weather caused the barge to take on water, the cargo to emulsify and shift, and ultimately resulted in a severe list. Captain Vandusen was certainly able to get weather reports predicting the arrival of a strong storm system to the Eastern Aleutian chain as early as the day before his departure. Whether he actually had them or not, in my opinion it was his duty to know the predicted weather along his anticipated route prior to departure, and remained his duty to monitor weather conditions and predictions throughout the voyage. The storm system was predicted to arrive with gale force winds in the vicinity of Unimak Pass on June 2nd. I have not seen a voyage plan for the Tug Captain Cae filed in this case (and I note that standard practice is to prepare a voyage plan). However, a review of the Tug Captain Cae logs indicate an average speed of 5 knots during the trip. The distance from Naknek to Unimak Pass is around 385 nautical miles. A simple route calculation and Pre-voyage plan would indicate an arrival in the early morning hours of June 2nd. This is the precise day that the National Weather Service, Anchorage, had predicted the storm to arrive on the day of the Tug Captain Cae's departure. The Tug Captain Cae logged Cape Sarichef at 0300 hrs, Unimak Pass at 0700 hrs, and Unimak Bight at 1600 hrs. on June 2nd. Captain Vandusen, in exercising the care and diligence of a reasonably competent tug master, should have been able to figure out and anticipate the contemporaneous arrival of his tug and tow and the predicted gale force winds, yet he did nothing to avoid the situation.
5. Captain Vandusen, with foreknowledge of the weather conditions, had three choices to avoid being in Unimak at the same time as the gale. Knowing that the low-pressure system was predicting strong to gale force winds he could have delayed his departure from Naknek. One day later the weather had moderated. He could have avoided timing his arrival for the precise day the gale was due to arrive by steaming at a slower speed during the trip. Steaming at 4 knots instead of 5 knots would have placed him at Unimak on the 3rd instead of the 2nd of June. And finally, he could have steamed at slow speed in circles in the lee of Unimak Island in Dublin Bay or Uria Bay until the weather abated.

Hiding behind islands and inlets in Alaskan waters, waiting for weather to pass, is a common practice for generations of tow boat Captains. Instead, Captain Vandusen chose none of these options. He continued through Unimak Pass, (an area well known for its rough conditions) at the peak of the predicted gale. The seas subjected the barge to at least 10' sea conditions resulting in the cargo shift and the worsening list of the barge. It is notable that after the fact the marine surveyor, Peter Costello, and Captain Dalton, agreed that for the continuing trip to Seattle they would not proceed into forecasted gale conditions where winds were forecasted to exceed 25 knots, combined sea and swell not to exceed 6'. Observation #11) Captain Vandusen's decision to depart and to transit Unimak Pass during the specific time of the storm's passage was a causal factor in the shifting of the cargo.

I reserve the right to amend this report should further information become available.

A handwritten signature in dark ink, appearing to read "Russ Johnson". The signature is fluid and cursive, with a large loop at the beginning and a long, sweeping tail.

Captain Russ Johnson